1995
Master Plan

The National Institutes of Health
Main Campus - Bethesda, Maryland

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Office of Research Services - Division of Engineering Services - Facilities Planning & Programming Branch

The 1995 NIH Bethesda Site Master Plan

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THE 1995 NIH BETHESDA SITE MASTER PLAN

Building 1, Bethesda Campus

Background

The most recent Master Plan for the Bethesda Campus of the National Institutes of Health (NIH) was approved in 1972. Since then, significant growth on and off the Bethesda campus has resulted in overstressed campus infrastructure and facilities, and has rendered the existing plan nearly obsolete. This 1995 Master Plan has been developed for a twenty year planning period, and personnel and space estimates have been based on five, ten, fifteen and twenty year increments. The NIH intends to update this 1995 Master Plan at approximately five year intervals.

The NIH Mission

Begun as a one-room Laboratory of Hygiene in 1887, the National Institutes of Health today is one of the world's foremost biomedical research centers. An agency of the Department of Health and Human Services, the NIH is the Federal focal point for health research.

The Mission of the National Institutes of Health is to expand fundamental knowledge about the nature and behavior of living systems; to apply that knowledge to extend the health of human lives; and to reduce the burdens resulting from disease and disability. The National Institutes of Health seeks to accomplish its mission by:

- Fostering fundamental discoveries, innovative research, and their applications in order to advance the Nation's capacity to protect and improve health;
- Developing, maintaining, and renewing the human and physical resources that are vital to ensure the Nation's capability to prevent disease, improve health, and enhance quality of life;

- Expanding the knowledge base in biomedical and associated sciences in order to enhance America's economic well-being and ensure a continued high return on the public investment in research; and
- Exemplifying and promoting the highest level of scientific integrity, public accountability, and social responsibility in the conduct of science.

In addition to the main NIH Campus in Bethesda, Maryland, which is the subject of this 1995 Master Plan and associated Environmental Impact Statement (EIS), the NIH maintains field stations in Poolesville, Baltimore and Frederick, Maryland; Research Triangle Park, North Carolina; Hamilton, Montana; and smaller facilities in other parts of the country. NIH also leases space in several buildings in the Bethesda/Rockville area of Montgomery County.

Planning Methodology

Development of this 1995 Master Plan began with the collection of relevant information about the mission, organization, personnel, programs and facilities at the NIH main campus and at other NIH-leased and owned properties in the Washington-Baltimore area. The most important source of information came from interviews of the leadership of the Institutes, Centers, and Divisions (ICDs). Within an interview questionnaire format, each attempted to predict biomedical research requirements for their ICD over the next twenty years, set forth the mission and program development they anticipated would be necessary to meet these requirements and estimated personnel needed to staff these programs over the next five, ten and twenty year time periods.

Subsequently, due to fundamental policy changes at NIH and in the Federal Government, it became evident that NIH faced personnel and budget constraints, at least through the turn of the century. Growth of the campus population in the next twenty years is anticipated by the Office of the Director of NIH to be limited by mandated reductions in staff through the year 2000, offset by a small growth largely from consolidation of intramural staff on campus from locations offsite.

From the population growth and revised premises and from studies of the opportunities and constraints of the Bethesda site, six plan concepts were examined. Two development alternatives were then developed from which a preferred plan emerged as the Draft 1995 Master Plan. The physical development of the site was expressed in an implementation plan that led, in turn, to phasing strategies.

At each stage of development of the 1995 Master Plan, the master planning team coordinated with, and made progress presentations to, NIH Management, the Master Plan Core Community Working Group, a group of concerned residents and institutions in the Bethesda area, and the staffs of the National Capital Planning Commission (NCPC) and the Maryland-National Capital Park and Planning Commission (M-NCPPC).

At the same time, the environmental impacts of growth and change on the campus together with various options were investigated, and mitigation measures were developed. An Environmental Impact Statement (EIS) has been developed as a part of this process.

Program Basis

In order to develop a framework for the 1995 Master Plan, a projection of functional, personnel and space needs has been accomplished by means of a questionnaire and interviews of the key personnel of the 24 Institutes, Centers and Divisions that constitute the National Institutes of Health plus key officials within the Office of the Director (OD) of the NIH. These projections have been revised to reflect the latest policies at NIH and the Federal Government.

Total population growth at the Bethesda Campus in the next twenty years is anticipated to be no more than ten percent (10%) of the 1993 campus population of 16,350 personnel. The primary growth at the Campus is expected to be through consolidation of Intramural Research Program (IRP) personnel from other NIH sites to the Bethesda Campus. If the demand for research and other facilities potentially causes the resultant population to exceed the capacity of 18,000 at the Bethesda Campus, NIH must consider off-campus leased or owned facilities.

The 1995 Master Plan anticipates current and future pressures on building areas, parking and transportation needs, and utilities infrastructure. The data have also provided the means to examine options to development on the site, including continuing to locate those components off-site that can be located off the main campus without compromise of the NIH biomedical research mission.

Over the 20 year period ending in 2015, the number of NIH personnel is estimated to change as indicated in the following table.

TABLE 1 PROJECTED 20 YEAR PERSONNEL GROWTH

	Washington/ Baltimore Area	Bethesda/ Rockville Area	Main Campus
Current	24,712	21,309	16,326
Year 2015	23,124	21,536	18,026
Percent Change	-6%	1%	+10%

Providing space for these personnel estimates, including decompression of overcrowded office and laboratory space, accommodation of utility upgrades, and addition of needed amenities, the 1995 Master Plan provides for a net growth of space on the Bethesda campus from approximately 7 million to 10 million gross square feet, an addition of about 3 million gross square feet of building area, not including parking structures. Most of this growth is in replacement and modernization of intramural research laboratories and the Clinical Center Renewal Program.

ICD Organization

The most significant organizational feature of most institutes - for purposes of the 1995 Master Plan - is their division into intramural and extramural research functions. The intramural basic and clinical research programs distinguish the NIH as an institution from all others in biomedical research. The NIH intramural research program enjoys unique interdisciplinary character, flexibility of the course of research and the freedom

to pursue research without imposition of predetermined duration or, in some instances, scope. In the Clinical Center, patients are physically close to researchers, and the rapidity with which clinical trials of research findings can be applied is unique in biomedical research. On the other hand, the grant funding of extramural research, accounting for 88% of the NIH research budget, requires advance definition of objective, duration and cost, and grantee institutions often cannot access patients for clinical trials as readily as at the NIH Bethesda campus.

Each ICD has an Office of the Director which requires convenient access to the corresponding offices of the other ICDs and to the Office of the Director of the NIH. Nearly all ICDs, given the choice, state that most of their programs should be located on the Bethesda campus. Research and grant personnel now in locally leased space complain of intellectual isolation, lack of opportunities that foster innovative scientific interrelationships and collaboration, and the frustrations of going to the campus for meetings, seminars or other business because of the time taken to travel between NIH facilities. Shuttle bus service is not practical at some sites, such as those in St. Elizabeth's in Southeast Washington, D.C. and in Baltimore, Frederick, and the NIH Animal Center (NIHAC) in Poolesville, Maryland.

The Warren Grant Magnuson Clinical Center Complex

The Clinical Center Complex

The heart of the intramural program is the Clinical Center Complex (CCC). The Clinical Center, which opened in 1953, has been the world's premier biomedical research facility, providing the basic clinical and patient proximities that have become the model for today's research, and it continues to play a major role in the missions of nearly all institutes, centers and divisions. However, age, condition of the infrastructure, and physical restrictions of the building itself threaten the performance of the facility and ultimately the vitality and creativity of the entire intramural program.

In its Fiscal Year (FY) 1995 report, the House Appropriations Committee requested that NIH perform a critical evaluation of the quality, appropriateness, size, and cost of the Intramural Research Program (IRP) in order to make informed decisions on a number of program issues, including how to address the deterioration of the Clinical Center Complex. This evaluation was performed by the External Advisory Committee (EAC), composed of leading physicians and scientists outside of NIH.

The Committee report of April 1994 included a strong endorsement for continuation of the IRP, particularly clinical research, and an acknowledgment of the poor physical condition of the CCC and the urgent need for corrective action. The Committee recommended beginning the renewal process by construction of a 250-bed research hospital with support functions and related research laboratories followed by a long range plan for the phased renovation of the existing complex.

Animals in Research

The use of animals in research by the intramural programs is extensive at the NIH which has one of the larger veterinary resource programs for research. Animals are currently scattered among buildings on the Bethesda and Poolesville campuses, as well as in some locally leased space and in Frederick, Baltimore and other field stations. Although the NIH is currently improving animal facilities on the Bethesda campus so that all facilities will be accredited by the American Association for Accreditation of Laboratory Animal Care (AAALAC), replacement of the existing Building 14/28 animal complex will ultimately be necessary. Because of severe infrastructure and environmental constraints on further construction at the NIH Animal Center in Poolesville and scientists' desire to keep animals as near the laboratories as possible, it does not appear feasible or desirable to move more animals from Bethesda to the NIHAC or to transfer more laboratory activities to Poolesville to be near the animals already there.

Campus Amenities

Interviews of ICD personnel revealed concerns about the character of the Bethesda site and about the insufficiency of places offering opportunities for socialization and collegiality or facilities for recreation, day care, dining and other services. While the general landscape character of the site was applauded, the intrusion of extensive surface parking and the visually confusing development of the campus suggest that many improvements in design and planning are necessary.

Parking and Transportation

Of all the Bethesda campus site issues, parking and transportation were of greatest concern to everyone interviewed. At the time, employees complained, there were not enough on-site parking spaces to accommodate the number of people who felt they must drive and, therefore, needed to park on the Bethesda campus. Many members of the

scientific community work irregular hours, and intramural investigators spend, on average, between 50 and 60 hours per week on campus, sometimes working until the early morning hours, leaving for home, then returning to the campus at midday, when a substantial amount of time is required to find a parking space, if one can be found at all.

On the other hand, concerns of the public and the official planning agencies about the increasing demands that traffic to the site makes on transportation infrastructure, the requirements for mitigation anticipated by the Clean Air Act, and the existing Memorandum of Understanding between the NIH, the Montgomery County Planning Board and the National Capital Planning Commission required extensive analysis of transportation issues in the 1995 Master Plan and development of a long range Transportation Management Plan.

Planning Objectives

The academic campus model emerged as the appropriate tool to guide the modernization and modest growth of the NIH on the Bethesda campus. The model provides a framework for construction of independent buildings while maintaining functional relationships and rational infrastructure and circulation systems. Italso represents a goal that combines intelligent and efficient land use with a high quality environment.

Although the NIH is organizationally different from academia, academic campuses are places where thoughtful research and studies are pursued. Physically, the term "campus" implies an expression of density, scale and quality of environment which is consistent with the 1995 Master Plan goals. The campus model evokes a clear image to guide future development decisions and provides a visual identity for the NIH.

This model is coincident with the current perceptions of the NIH as a campus-like environment. This is true both in the minds of the researchers and staff and generally within the surrounding community.

Due to the extensive level of existing development, the Bethesda campus has certain constraints, but at the same time existing physical site features present opportunities that can be enhanced and incorporated successfully into the 1995 Master Plan.

The basic goals of the 1995 Master Plan are to:

- Foster innovative research strategies designed to advance the Nation's capacity to improve health.
- Provide a physical framework for the changing nature, character and urgency of medical research and education.
- Provide a supportive environment for the people involved in NIH activities.
- Enhance and respect the stability and integrity of the surrounding residential community.
- Protect the natural resources and environmental qualities of the NIH campus and the region.
- Foster communication about NIH goals and policies.

Planning Principles

The Planning Principles are derived from the Goals and Objectives. These Principles represent broad physical design objectives and cover eight topics:

Campus Structure & Organization

Landscape and Open Space

Development Proximity to Metro

Development Density Zones and Community Buffers

Functional Relationships

Clinical Center Renewal Development

Public Access and Orientation

Parking

Description of the 1995 Master Plan Concepts

Functional Relationships

The Clinical Center Complex will continue to be the functional "heart" of the campus. Laboratory and research functions will surround the Clinical Center to the east, west and south. Support functions, including shipping and receiving, storage and maintenance, will be located in a complex to the south of the central utilities plant. The administrative functions will be located along the eastern side of the site relating to the more public side of the campus and closer to the Medical Center Metro station. A large portion of the new laboratory buildings at the center of the campus will also be convenient to the Metro station.

The NIH Stream

Open Space Systems

These will comprise interconnected and defined quadrangle spaces as the basic structure of the campus. A central mall south of the clinical center is proposed to organize the buildings surrounding it and to maintain a north-south pedestrian connection. Secondary spaces will radiate from this central space and help connect the building groupings. A natural system of open spaces created by the NIH stream and other existing landscape features at the four corners of the site will be integrated into the campus structure.

Building Patterns

Five existing building groups will remain and anchor the site: the administrative group (Building 31); the Historic Core (Buildings 1-5); the Clinical Center Complex; the west laboratory group (Buildings 36 - 37); and the Lister Hill - Natcher Building group. The core of the campus will be redefined by two new laboratory groups to replace the support and computer services Building 12/13 complex in the center and the existing animal facility in Buildings 14/28 to the south. At the perimeter of the campus are the residential group to the north, the replacement animal facility to the south, and several stand-alone structures such as Building 16 (the Stone House), Building 60 (the Convent), and Building 62 (the Children's Inn). All new development is integrated into the orthogonal grid originally generated by the Historic Core.

The Children's Inn

Massing and Heights

The tallest structure - the Clinical Center Complex - will continue to be the focal point of the campus. Lower buildings will be placed along the perimeter, and to the extent possible, a transition in height will be made from the tallest building to the lowest. Building heights will be below a plane rising five degrees from horizontal at the perimeter of the site to maintain an acceptably low scale as seen from the residential surrounding areas.

Circulation

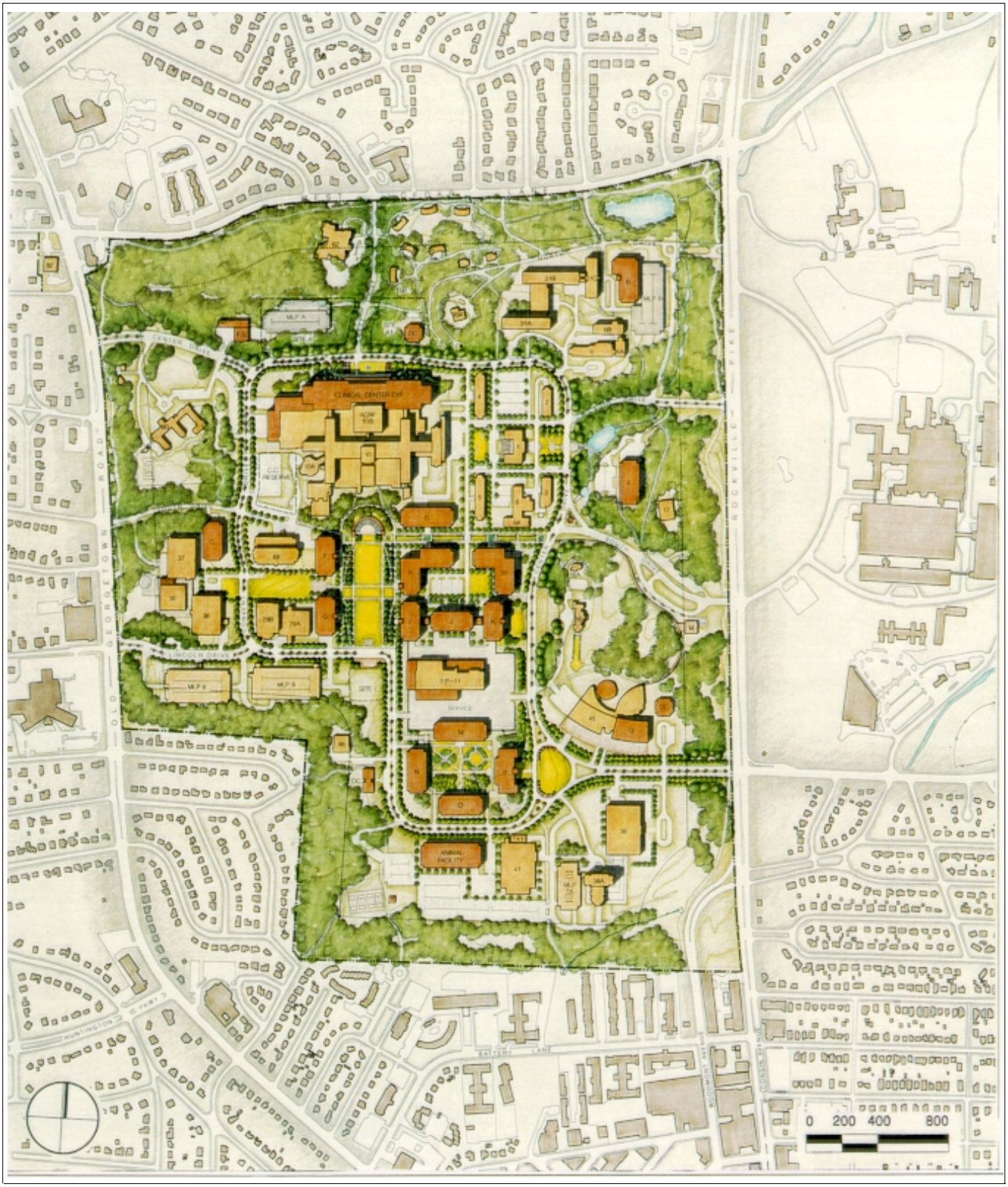
A primary interior roadway loop will become the organizing element for vehicular campus circulation. Secondary roads will connect to the loop, and five major site entries will be emphasized. Internal to the loop will be primarily a pedestrian precinct where pathways connect from the north of the loop road, through the central mall and the Clinical Center Complex to a site for central campus amenities to the south. A second pedestrian corridor will connect the central mall with the Metro station on the east and Old Georgetown Road on the west.

Utilities

In coordination with the Master Utilities Plan, the utilities distribution concept for the Bethesda Campus includes a loop system to provide redundant service to all parts of the campus. In the 1995 Master Plan, the Power Plant (Building 11) is expanded to the south and west, and remains in the center of the campus. From the power plant, a primary utility tunnel network extends north-south, along the east side, and east-west across the center of the campus. A secondary utility loop (direct buried or tunneled) extends to the outer edges of the campus, essentially following the path of the vehicular loop road.

Parking

The goals of the Master Plan related to parking include reducing the employee parking ratio to 0.45 spaces per employee by the end of the Master Plan period, and to remove all parking from the buffer areas. Should paid parking be mandated throughout the federal government and/or legislation be enacted permitting agencies to retain parking revenues, NIH will strive to further reduce the parking ratio below 0.45 by continuing transportation management activities.



NIH
Master Plan
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EXISTING BUILDING
PROPOSED BUILDING
PROPOSED MULTI-LEVEL PARKING
PLAZA/PEDESTRIAN CIRCULATION
OPEN SPACE/RECREATION
CENTRAL MALL/PRIMARY OPEN SPACE

Figure 1.1

Illustrative Master Plan

FPPB / DES / ORS

Oudens + Knoop, Architects, PC

Florance Eichbaum Esocoff King Architects

6.6 PHASING

The following diagrams (Figures 6.6.1 through 6.6.4) and text describe the implementation of the Master Plan in five year increments over the next twenty years. The purpose of the phasing analysis is to give guidance to the sequence of projects to be constructed on campus, to emphasize the priority of key developments, and to illustrate potential future development conflicts. Of particular importance is the development of a strategy to relocate or replace key functions to accommodate new construction in the central areas of the site closest to Metro access.

The phasing plan is based on a linear progression toward fulfilling the programmatic needs projected by the Master Plan. The actual growth and replacement rate on campus will depend on evolving national policy and budget decisions. The phasing illustrates issues and subsequent strategies affecting sequencing such as project priorities, replacement and demolition, and critical continuity of campus functions including services and infrastructure. The most significant factor in this specific sequence is the Clinical Center Complex Renewal program. If the program of requirements, priority, schedule or siting of this project changes, it obviously affects the Master Plan phasing.

Establishing the framework and character of the campus is an important consideration. Priority should be given to implementation of projects which define the key open spaces of the campus, such as the new lab building sites along the Central Mall. Emphasis should also be placed on projects which replace obsolete structures or which allow a more efficient use of land resources. The proposed Master Plan phasing can be summarized in four steps: 1) construction of Phase I of the Clinical Center Renewal program and development of laboratory buildings at the north end of the campus; 2) replacement of the Animal Facility and redevelopment of the Building 14/28 site for the South Quad laboratory group; 3) replacement of the Support and Computer Services facilities and redevelopment of the Building 12/13 site for the East Quad laboratory group, and; 4) the completion of the Central Mall.

In each section, major activities are identified along with approximate dates of occurrence. At the end of each section a tabulation is given showing the total building area provided which corresponds with the building area target indicated in the Implementation Plan set forth in Section 2.10.2. Square footage figures do not include structured parking areas.

Phasing 1996 - 2000 (Table 6.6.1)

(Dates and order of listing are approximate order of implementation. Square footage areas exclude parking structures.)

Existing Total Area	7,036,701 gsf
• Convert Building 2 to Office Space	
• North Loop Road construction	
• Demolish Building 20	(66,140) gsf
• Demolish Wilson Estate structures	
• Construct CLF (Building 50)	247,968 gsf
• Power Plant expansion - Ph. I & II	62,520 gsf
• Construct replacement Fire Station	22,900 gsf
• Demolish exist. Fire Station (portion Bldg. 12)	(4,000) gsf
• Begin construction Clinical Center Renewal Phase I	
• Implement Stormwater Management - NE corner of site	
• Remove buffer parking east of Natcher Building	
• Remove south buffer parking	
• South Buffer landscape & screening improvements	
• Construct pedestrian walkways and bike path connectors to Metro station, Cedar Lane, and Battery Lane	
• Upgrade east-west central pedestrian walkway and construct amphitheater area	
Master Plan Net Development **Period sub-total**	**263,248** gsf
Cumulative sub-total Year 2000	**7,299,949**gsf

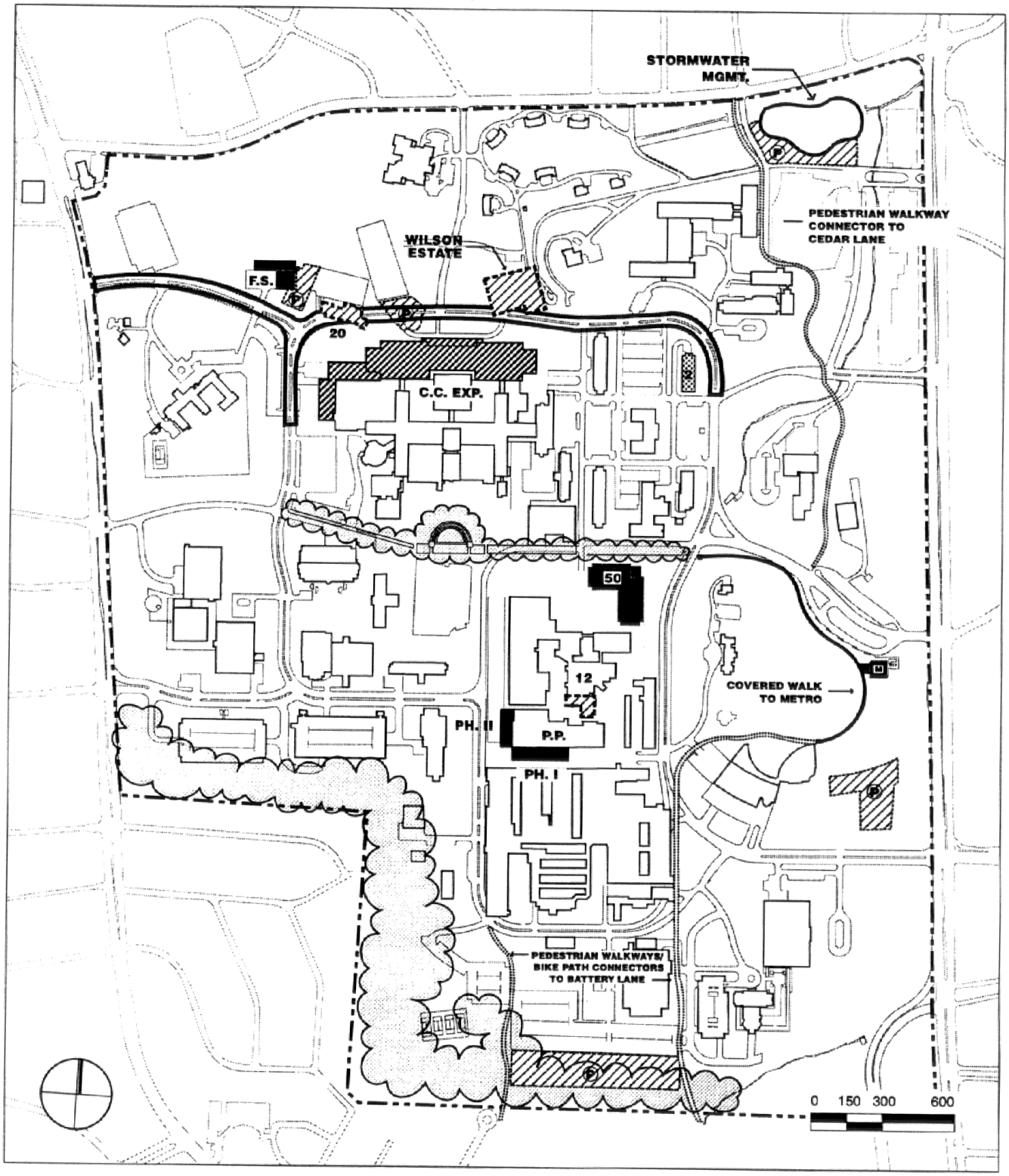
Phasing objectives and relationships

The greatest need among NIH facilities is the timely upgrade of the Clinical Center Complex, and many of the projects proposed in the 1996 - 2000 phase of the Master Plan support this objective. Relocation and construction of the north section of the proposed campus loop road (Center Drive) will be required prior to construction of the Clinical Center Renewal Phase I component, in order to maintain vehicular access through the north section of the campus. This roadway relocation will likely require the demolition of residential Building 20 and structures of the former Wilson Estate. The implementation of the stormwater management pond in the northeast corner of the site will provide quality control for additional runoff from the Clinical Center expansion, both during and after construction, and will also upgrade stormwater control for the site as a whole.

Construction of the Consolidated Laboratory Facility (CLF - Building 50) will create needed modern laboratory space to replace Buildings 2, 3 and 7 which are no longer viable as laboratory buildings.

To meet existing critical service needs for the campus, projects proposed include expansions to the existing Power Plant (Building 11) and construction of a new Fire Station to replace the inadequate Building 12 facility.

Site character enhancements include the removal of buffer parking on the south and east sides of the campus, and enhancement of landscape screening to improve the buffer between NIH and adjacent neighborhoods along the south perimeter of the site. The Master Plan also proposes the early construction of pedestrian and bicycle connections to the campus and the Metro Station from surrounding areas to promote non-auto access.



NIH Master Plan

Bethesda Campus

UNDER CONSTRUCTION

BUILDING ACTIVATED/ MLP COMPLETED

DEMOLITION / REMOVAL

BUILDING RENOVATED

LOOP ROAD CONSTRUCTION

LANDSCAPE IMPROVEMENTS

COMPLETED PREVIOUSLY

Figure 6.6.1

Phasing 1996 - 2000

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Phasing 2001 - 2005 (Table 6.6.2)

(Dates and order of listing are approximate order of implementation. Square footage areas exclude parking structures.)

2000 Net Development	7,299,949 gsf
• Convert Building 3 to office space	
• Construct south loop road	
• Construct replacement Animal Facility	289,000 gsf
• Demolish Bldg. 14/28 complex	(320,660) gsf
• Construct MLP A	
Phase I	850,000 gsf
• Construct Lab Bldg. C	113,500 gsf
• Demolish Buildings 7 & 9	(93,658) gsf
• Construct Lab Bldg. D	160,000 gsf
• Power Plant expansion - Ph. III	13,200 gsf
• Construct north & south day care centers	17,500 gsf
• Demolish Building T46	(3,000) gsf
• Construct Lab Bldg. B	149,000 gsf
• Construct MLP B	
• Remove northeast buffer parking	
• Historic Core landscape & streetscape improvements	

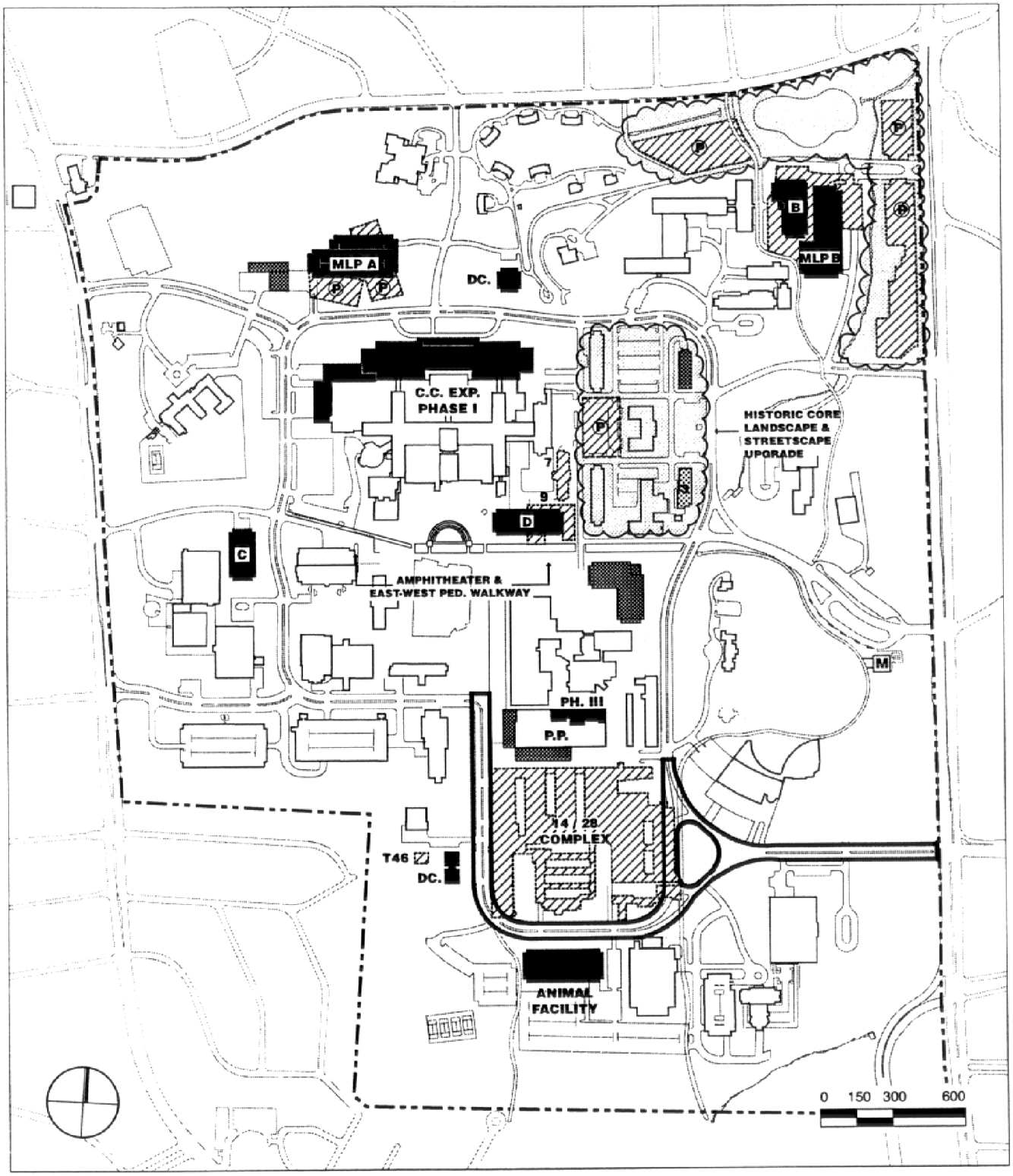
Master Plan Net Development	**Period sub-total**	**1,174,882** gsf
	Cumulative sub-total Year 2005	**8,474,831** gsf

Phasing objectives and relationships

The completion of the Clinical Center Renewal expansion is not anticipated until the 2001 - 2005 phase. The second major objective of this time period is the clearing of the Building 14/28 site for future laboratory development. To accommodate the demolition of the existing structure, which is considered obsolete, a replacement Animal Facility must first be constructed. Construction of the south portion of the loop road should also be completed to improve internal access to this area of the site.

To accommodate anticipated lab population growth and decompression for this period, laboratory Buildings B, C, and D are proposed to be built on open and available sites at the north end of the campus. To meet the parking needs of this growth in population to the north, and to facilitate the early removal of parking from the buffers, parking structures MLP A and MLP B are also proposed for this phase.

Site character enhancements for this phase include removal of buffer parking in the northeast corner of the site, and landscape/streetscape improvements near the Convent Building (Building 60) and in the Historic Core area. Upgrades are also proposed for the central east-west pedestrian walkway through the campus, along with construction of the amphitheater to help define the center of the campus as a gathering place. New daycare facilities are proposed for the north and south sides of campus to meet growing NIH needs, and the south daycare facility is proposed to be removed from the buffer zone.



NIH Master Plan

Bethesda Campus

UNDER CONSTRUCTION

BUILDING ACTIVATED/ MLP COMPLETED

DEMOLITION / REMOVAL

BUILDING RENOVATED

LOOP ROAD CONSTRUCTION

LANDSCAPE IMPROVEMENTS

COMPLETED PREVIOUSLY

Figure 6.6.2

Phasing 2001 - 2005

FPPB/DES/ORS

Oudens & Knoop, Architects, PC.

Florance Eichbaum Esocoff King Architects

Phasing 2006 - 2010 (Table 6.6.3)

(Dates and order of listing are approximate order of implementation. Square footage areas exclude parking structures.)

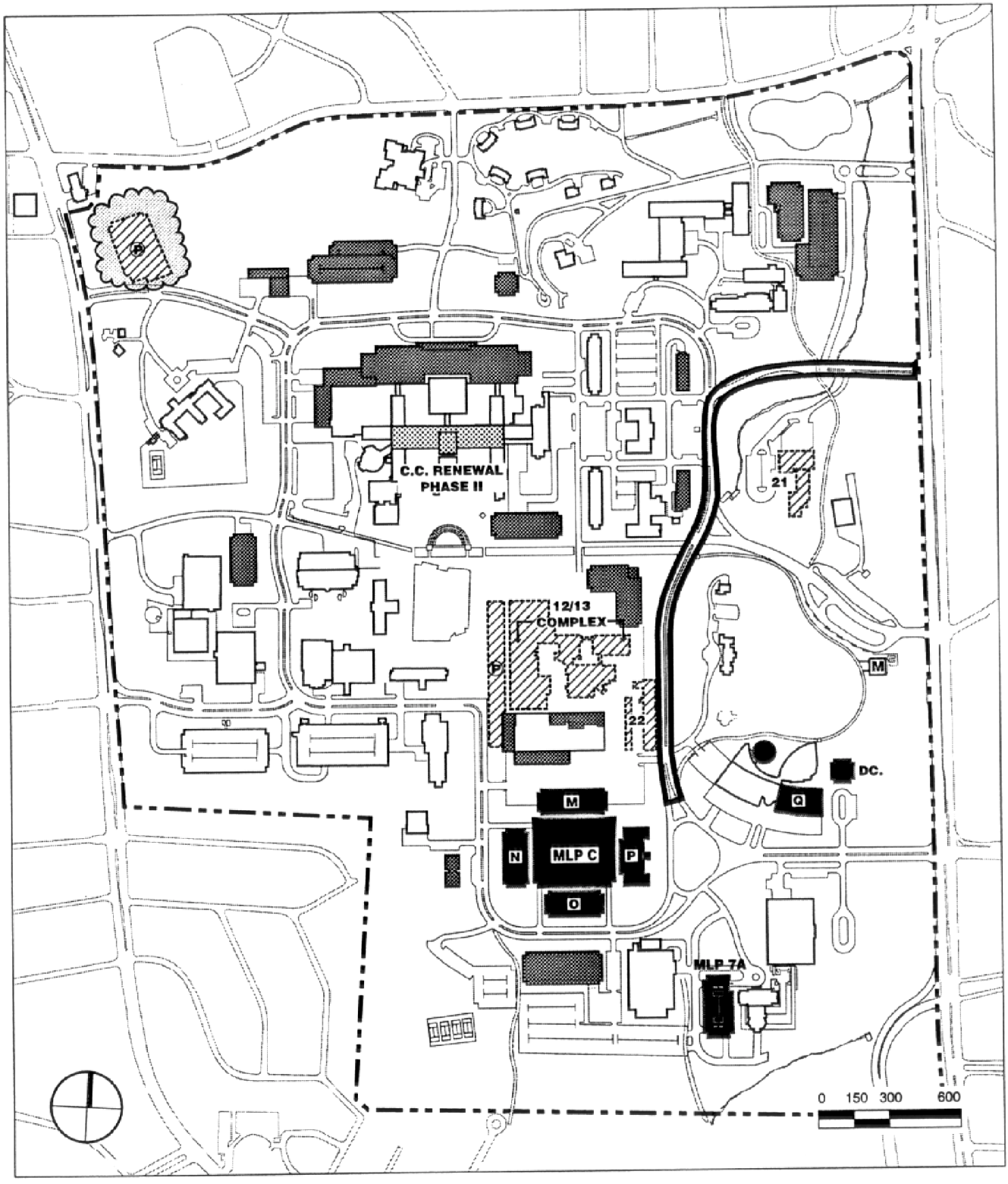
2005 Net Development		8,474,831 gsf
• Construct east loop road		
• Clinical Center Renewal Phase II - renovate Bldg. 10 core		
• Construct addition to MLP 7A		
• Construct Lab Bldg. P		224,800 gsf
• Construct Lab Bldg. N		133,000 gsf
• Construct Lab Bldg. O		159,600 gsf
• Construct replacement 12/13 office space (site Q)		186,000 gsf
• Construct east daycare center		10,000 gsf
• Construct replacement 12/13 shops and support areas (site M)		260,000 gsf
• Construct replacement hazardous waste facility (site M)		32,550 gsf
• Construct MLP C		
• Remove northwest buffer parking		
• Demolish Bldg. 12/13 complex		(426,269) gsf
• Demolish Bldg. 21 complex		(33,000) gsf
Master Plan Net Development	**Period sub-total**	**546,681** gsf
	Cumulative sub-total Year 2010	**9,021,512** gsf

Phasing objectives and relationships

Ongoing renewal of the existing Clinical Center (Building 10) continues to be a major objective of the 2006 - 2010 phase. A second major objective is the development of more campus density near the Metro station. Lab Buildings P, N, and O, and replacement shops/support Building M are proposed for the cleared Building 14/28 site. The replacement of the shops facility, along with the construction of the replacement support and computer services office facility (Building Q) adjacent to the Natcher Building, accommodate the demolition of the Building 12/13 complex for more dense future redevelopment. Likewise, the replacement of the radiation safety/waste handling facility near Building M will free the Building 21 site for redevelopment.

To accommodate the projected population growth in the south/southeast portion of the site, construction of parking structure MLP C and an addition to MLP 7A is proposed (contingent upon funding), along with the addition of the east daycare facility. Upgrades to the east section of the loop road are also anticipated in conjunction with the improvement of the Building 12/13 site.

Site enhancements include removal of the last portion of buffer parking and landscape enhancements in the northwest corner of the site.



NIH
Master Plan
Bethesda Campus

- UNDER CONSTRUCTION
- BUILDING ACTIVATED/ MLP COMPLETED
- DEMOLITION / REMOVAL
- BUILDING RENOVATED
- LOOP ROAD CONSTRUCTION
- LANDSCAPE IMPROVEMENTS
- COMPLETED PREVIOUSLY

Figure 6.6.3

Phasing
2006 - 2010

FPPB/DES/ORS

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Phasing 2011 - 2015 (Table 6.6.4)

(Dates and order of listing are approximate order of implementation. Square footage areas exclude parking structures.)

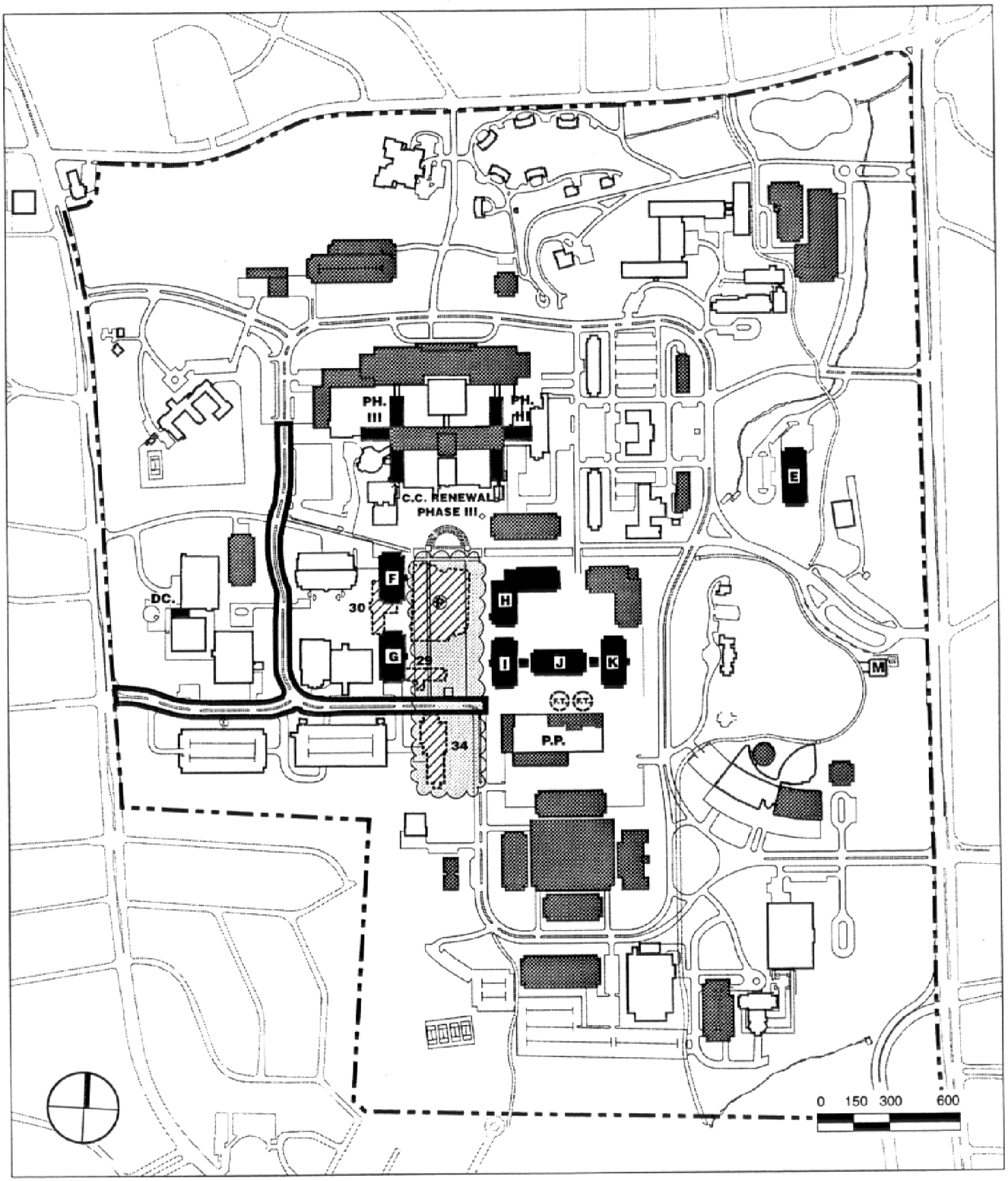
2010 Net Development		9,021,512 gsf
• Construct west loop road		
• Clinical Center Renewal Phase III - convert Clinical Center space to lab use		
• Construct Lab Bldg. H		299,600 gsf
• Construct Lab Bldg. I		168,700 gsf
• Construct Lab Bldg. J		107,545 gsf
• Construct Lab Bldg. K		168,700 gsf
• Demolish Bldg. 30		(93,940) gsf
• Construct Lab Bldg. F		165,200 gsf
• Demolish Bldg. 29		(89,949) gsf
• Construct Lab Bldg. G		141,600 gsf
• Construct & landscape Central Mall		
• Demolish Bldg. 34		(72,547) gsf
• Relocate fuel storage tank area to service yard north of Power Plant		
• Construct Lab Bldg. E		186,200 gsf
• Construct west day care center expansion		5,600 gsf
Master Plan Net Development	**Period sub-total**	**986,709** gsf
	Cumulative sub-total Year 2015	**10,008,221** gsf

Phasing objectives and relationships

Ongoing renewal of the existing Clinical Center (Building 10) continues to be a major objective of the 2011 - 2015 phase, with some of the renovated space being available to accommodate general campus laboratory space growth. A second major objective of this phase is the redevelopment of the central portion of the campus for proximity both to the Clinical Center and to Metro of more dense development. Lab Buildings H, I, J, and K are proposed to be built on the former Building 12/13 site. Lab Building E is proposed to be constructed on the former Building 21 site. Outdated Buildings 29 and 30 are proposed to be replaced with modern laboratory Buildings F and G.

Another major objective is the completion of the Central Mall as the heart of the campus. With the enclosure of the edges of the space by Buildings F, G, H, and I, the interior landscaping can be completed. To complete the south end of the space, the Master Plan proposes that Building 34 be demolished and the existing underground fuel oil storage tanks be replaced within the service yard north of the Power Plant. Future plans may consider the construction of a Campus/Employee Center on the former Building 34 site.

Other campus developments proposed during this period include the completion of the west section of the loop road and the expansion of the west daycare center.



NIH
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- BUILDING ACTIVATED/ MLP COMPLETED
- DEMOLITION / REMOVAL
- BUILDING RENOVATED
- LOOP ROAD CONSTRUCTION
- LANDSCAPE IMPROVEMENTS
- COMPLETED PREVIOUSLY

Figure 6.6.4

Phasing 2011 - 2015

FPPB/DES/ORS

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